DISPERSANT DATA SUMMARY 6/19/10

Region 6:

- 428 nearshore surface water samples have been submitted to date for analysis of dispersant parameters. The first samples were collected 5/11/10. Samples have been analyzed by EPA Houston and Accutest (R6 START lab).
  - EPA Houston reported 2 butoxyethanol, propylene glycol, and 2-propanol.
  - Accutest reported propylene glycol, 2 butoxyethanol, and 2 ethylhexyl alcohol.
- 31 of the 428 samples have been loaded into SCRIBE with final (validated) results.
- 183 of the 428 samples have been loaded into SCRIBE with preliminary results.
- 214 of the 428 do not have results available in Scribe.
- Requested dispersant constituent parameters include:

  Propylene glycol - (PG)
  Di(2-ethylhexyl) sodium sulfosuccinate (reported as organic sulfonic acid salt) - (Org Salt) (DOSS)
  2-propanol, 1-(2-butoxy-1-methylethoxyl) - (2P)
  2-ethylhexyl alcohol - (2EA)
  2-Butoxyethyl alcohol / 2-Butoxyethanol - (2BE)

- EPA experts determined that the suite of dispersant constituent parameters above is useful for meeting data quality objectives for dispersant characterization.
- PG is being reported by Accutest by a modified SW8260 SIM analysis
- 2EA and 2BE are being reported by Accutest by a modified SW8015B analysis

Analytical Issues Being Confronted:

- Key issues and challenges include the following:
  - The parameters are not routine for environmental samples and do not have published methods that have been studied and proven.
  - Standards for instrument calibration were difficult to locate.
  - The labs are having to develop methods to report these parameters and yet still provide analytical results while the methods are being refined.
  - There has not been industry-wide agreement for analysis of these parameters. If various labs are using different procedures, the results may not be comparable. Participating labs for government entities need to coordinate and share information.
  - Accutest is currently working to report the remaining two parameters – DOSS and 2P. They have standards and moving forward with development.
  - If the commercial labs were able to obtain some pure dispersant, it would help with proving the developed methods.
- Confidential Business Information issue delayed the use of commercial labs, but has been resolved.
- Because some laboratory methods are under development, there are delays with some of the data.

Results and Early Conclusions

- Results to date have been non-detect. We have not been able to see any detectable concentrations of the targeted dispersant constituents with the current methods.
- Based on Level IV data validation of the first 5 data sets, START R6 chemists are comfortable with the data being generated by Accutest for 2BE and 2EA. Questions

have been raised with the PG data. Accutest has made modifications for PG based on the issues that have been raised.

- START R6 recommends additional Level IV data validation on more recent samples collected and submitted for dispersant analysis (5 more data sets). If Accutest has been consistent with the 2BE and 2EA, it will be recommended that Level II data validation be completed on all data sets for these two parameters, and the results posted as final.
- The status of PG data (preliminary or final) will be dependent on the second set of Level IV data validation.